

NOTICE OF DRAFTSPERSON'S  
PATENT DRAWING REVIEWThe drawing(s) filed (insert date) 7/28/99 are:

- ☒ approved by the Draftsperson under 37 CFR 1.84 or 1.152.  
☒ objected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated below. The Examiner will require submission of new, corrected drawings when necessary. Corrected drawing must be submitted according to the instructions on the back of this notice.

1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings:  
Black ink. Color.  
Color drawings are not acceptable until petition is granted.  
Fig(s) \_\_\_\_\_

2. PHOTOGRAPHS. 37 CFR 1.84(b)  
Pencil and non black ink not permitted. Fig(s) \_\_\_\_\_

3. TYPE OF PAPER. 37 CFR 1.84(e)  
1 full-tone set is required. Fig(s) \_\_\_\_\_  
Photographs not properly mounted (must use bristol board or photographic double-weight paper). Fig(s) \_\_\_\_\_  
Poor quality (half-tone). Fig(s) \_\_\_\_\_

4. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes:  
Paper not flexible, strong, white, and durable. Fig(s) \_\_\_\_\_  
Erasures, alterations, overwritings, interlineations, folds, copy machine marks not accepted. Fig(s) \_\_\_\_\_  
Mylar, velum paper is not acceptable (too thin). Fig(s) \_\_\_\_\_

5. MARGINS. 37 CFR 1.84(g): Acceptable margins:  
21.0 cm by 29.7 cm (DIN size A4)  
21.6 cm by 27.9 cm (8 1/2 x 11 inches)  
All drawing sheets not the same size. Fig(s) \_\_\_\_\_  
Sheet(s) \_\_\_\_\_  
Drawings sheets not an acceptable size. Fig(s) \_\_\_\_\_

6. VIEWS. 37 CFR 1.84(h)  
REMINDER: Specification may require revision to correspond to drawing changes.  
Partial views. 37 CFR 1.84(h)(2)  
Brackets needed to show figure as one entity. Fig(s) \_\_\_\_\_  
Views not labeled separately or properly. Fig(s) \_\_\_\_\_  
Enlarged view not labeled separately or properly. Fig(s) \_\_\_\_\_

7. SECTIONAL VIEWS. 37 CFR 1.84(h)(3)  
Hatching not indicated for sectional portions of an object. Fig(s) \_\_\_\_\_  
Sectional designation should be noted with Arabic or Roman numbers. Fig(s) \_\_\_\_\_

8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i)  
Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s) \_\_\_\_\_

9. SCALE. 37 CFR 1.84(k)  
Scale not large enough to show mechanism without crowding when drawing is reduced in size to two-thirds in reproduction. Fig(s) \_\_\_\_\_

10. CHARACTER OF LINES, NUMBERS, & LETTERS. 37 CFR 1.84(i)  
Lines, numbers & letters not uniformly thick and well defined, clean, durable, and black (poor line quality). Fig(s) 3

11. SHADING. 37 CFR 1.84(m)  
Solid black areas pale. Fig(s) \_\_\_\_\_  
Solid black shading not permitted. Fig(s) \_\_\_\_\_  
Shade lines, pale, rough and blurred. Fig(s) \_\_\_\_\_

12. NUMBERS, LETTERS, & REFERENCE CHARACTERS. 37 CFR 1.84(p)  
Numbers and reference characters not plain and legible. Fig(s) \_\_\_\_\_  
Figure legends are poor. Fig(s) \_\_\_\_\_  
Numbers and reference characters not oriented in the same direction as the view. 37 CFR 1.84(p)(1). Fig(s) \_\_\_\_\_  
English alphabet not used. 37 CFR 1.84(p)(2). Figs \_\_\_\_\_  
Numbers, letters and reference characters must be at least .32 cm (1/8 inch) in height. 37 CFR 1.84(p)(3). Fig(s) \_\_\_\_\_

13. LEAD LINES. 37 CFR 1.84(q)  
Lead lines cross each other. Fig(s) \_\_\_\_\_  
Lead lines missing. Fig(s) \_\_\_\_\_

14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.84(i)  
Sheets not numbered consecutively, and in Arabic numerals beginning with number 1. Sheet(s) \_\_\_\_\_

15. NUMBERING OF VIEWS. 37 CFR 1.84(u)  
Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig(s) \_\_\_\_\_

16. CORRECTIONS. 37 CFR 1.84(w)  
Corrections not made from prior PTO-948 dated \_\_\_\_\_

17. DESIGN DRAWINGS. 37 CFR 1.152  
Surface shading shown not appropriate. Fig(s) \_\_\_\_\_  
Solid black shading not used for color contrast. Fig(s) \_\_\_\_\_

COMMENTS

REVIEWER DJDATE 8/24/99TELEPHONE NO. 308-0044ATTACHMENT TO PAPER NO. 5

## INFORMATION ON HOW TO EFFECT DRAWING CHANGES

### 1. Correction of Informalities--37 CFR 1.85

File new drawings with the changes incorporated therein. The application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application, should be placed on the back of each sheet of drawings in accordance with 37 CFR 1.84(c). Applicant may delay filing of the new drawings until receipt of the Notice of Allowability (PTOL-37). Extensions of time may be obtained under the provisions of 37 CFR 1.136. The drawing should be filed as a separate paper with a transmittal letter addressed to the Drawing Processing Branch.

### 2. Timing for Corrections

Applicant is required to submit acceptable corrected drawings within the three-month shortened statutory period set in the Notice of Allowability (PTOL-37). If a correction is determined to be unacceptable by the Office, applicant must arrange to have acceptable corrections resubmitted within the original three-month period to avoid the necessity of obtaining an extension of time and paying the extension fee. Therefore, applicant should file corrected drawings as soon as possible.

Failure to take corrective action within set (or extended) period will result in **ABANDONMENT** of the Application.

### 3. Corrections other than Informalities Noted by the Drawing Review Branch on the Form PTO-948

All changes to the drawings, other than informalities noted by the Drawing Review Branch, **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes:

1. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	2. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
3. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	4. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
5. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	6. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
7. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	8. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
9. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	10. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
11. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	12. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
13. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	14. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
15. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	16. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
17. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	18. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
19. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	20. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
21. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	22. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
23. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	24. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
25. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	26. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
27. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	28. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
29. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	30. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
31. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	32. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
33. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	34. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
35. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	36. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
37. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	38. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
39. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	40. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
41. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	42. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
43. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	44. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
45. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	46. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
47. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	48. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
49. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	50. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
51. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	52. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
53. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	54. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
55. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	56. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
57. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	58. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
59. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	60. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
61. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	62. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
63. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	64. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
65. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	66. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
67. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	68. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
69. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	70. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
71. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	72. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
73. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	74. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
75. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	76. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
77. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	78. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
79. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	80. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
81. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	82. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
83. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	84. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
85. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	86. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
87. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	88. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
89. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	90. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
91. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	92. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
93. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	94. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
95. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	96. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
97. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	98. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)
99. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)	100. NUMBER OF SHEETS OF DRAWINGS (PTOL-37)

REVIEWED BY: [Signature]  
DATE: [Date]  
APPROVED BY: [Signature]  
DATE: [Date]